

ABSTRACT

It is intended to provide an efficient and sure gene targeting method embodied at an arbitrary position in the genome of an organism and a kit therefor. It is also intended to provide a method for targeted-disruption of an arbitrary gene in the genome of an organism which comprises: 1) the step of providing the whole sequential data of the genome of the organism; 2) the step of selecting at least one arbitrary region in the sequence; 3) the step of providing a vector containing a sequence homologous with the region selected above and a marker gene; 4) the step of transforming the organism by the vector; and 5) the step of providing the organism under such conditions as allowing homologous recombination. Moreover, the genome of a hyperthermostable bacterium and its array are provided.